

## PATENT CLAIMS

1. Method for reducing an amount of process data to be transferred from a field device, wherein the process data include information concerning the operating condition of the field device, and/or information concerning process variables registered with the field device, and/or identification data of the field device, characterized in that,

the process data occurring during an interval between two transfers of data is evaluated and stored, wherein the process data are reduced by means of the evaluating, and wherein the reduced process data are transferred to a process control center.

2. Method as claimed in Claim 1,  
characterized in that,

the transfer of the reduced process data is executed only at the occurrence of specified conditions.

3. Method as claimed in one of the preceding Claims,  
characterized in that,  
in the evaluating, the process data are divided into static and dynamic data, wherein process data which have changed since the last executed evaluating are classified as dynamic data.

4. Method as claimed in Claim 3,  
characterized in that,

for the dynamic data, coded ranges are specified, wherein only the code of the affected range, in which the process parameter is contained, is transferred to the process control center.

5. Method as claimed in Claim 3 or 4,  
characterized in that,  
static data are transferred as binary state-values.

6. Method as claimed in Claim 3,  
characterized in that,

from the dynamic data, a data word to be transferred is formed, wherein the data word represents the altered value of the process parameter, or the difference between the new value and the old value of the process parameter.

7. Method as claimed in one of the preceding Claims,  
characterized in that,  
the specifications for the evaluating of the process data, and/or for the execution of the transfer of the reduced process data, can be influenced by a user.

8. Method as claimed in Claim 7,  
characterized in that,  
the specifications for the transfer of the reduced process data include  
a predetermined time span, and/or a specified time on the clock, and/or  
the occurrence of specified events.

9. Method as claimed in one of the preceding Claims,  
characterized in that,  
an individual device description file is assigned to the field device  
by means of the identification data, wherein information concerning  
the field device is read out of the data description file.

10. Method as claimed in one of the preceding claims,  
characterized in that,  
the Internet is used as communication platform between the field device  
and the process control station.

11. Method as claimed in one of the preceding claims,  
characterized in that,  
the transfer of data between the field device and the process control  
station is unidirectional, wherein a bidirectional communication is  
then implemented when data from the process control station must be  
transferred to the field device.

12. Apparatus for reducing an amount of process data to be transferred,  
wherein the process data includes information concerning an operating  
condition of the field device, and/or information concerning process  
variables registered with the field device, and/or identification  
data of the field device,  
characterized in that,  
an evaluation/control unit and a storage unit are provided, wherein  
the evaluation/control unit, during an interval between two transfers  
of data, evaluates and stores the acquired process data in the storage  
unit, and, by means of suitable communication units, transfers such  
process data to a process control center.

13. Apparatus as claimed in Claim 12,  
characterized in that,  
the evaluation/control unit and the storage unit are part of a field  
device.

14. Apparatus as claimed in Claim 12 or 13,  
characterized in that,  
the specifications which can be influenced by the user are entered  
by means of an operating- and display-unit.